

**Report Date:** 1/18/2011

**Samples Received:** 1/7/2011

**Contact Information & Location**

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**Sample Information**

| Sample | Location          | Species                | Soil Total<br>Dissolved Salt<br>(dS/m) |    | Soil Nitrate<br>(ppm) |    | Soil pH |    |
|--------|-------------------|------------------------|--|----|-----------------------|----|---------|----|
|        |                   |                        |  |    |                       |    |         |    |
| 1      | Athletic<br>Field | Tifway II Bermudagrass | 1.34                                   | ok | 4.4                   | ok | 7.14    | ok |

**Diagnosis**

Samples were found to be infested with Rhizoctonia Large Patch, which is common on warm season turf in cool, wet weather. Disease development is likely due to the wet conditions experienced in southern California. Fungicide applications will help stop the disease, and improving soil drainage will help avoid the disease and create conditions less suitable for its development.

**Standard Recommended Practices**

**Rhizoctonia Brown Patch/Large Patch on Warm Season Turf (*R. solani*)**

- Avoid excess irrigation
- Promote practices that reduce compaction and improve soil drainage
  - Regular aerification
  - Sand topdressing
- Reduce thatch accumulation - less than 1/2-inch is desirable (e.g. aerification and topdressing)
- Reduce shading and increase air movement if possible
- Warm season grass can often recover quickly if there is adequate heat (daytime temps above 75°F) for grass to grow actively
  - Excess nitrogen applications above the recommended range of 6 to 20 ppm of soil nitrate may not help recovery
  - Application of 0.8 lb of KCl per 1000 sq ft may aid recovery if weather is adequate for warm season growth
- Apply fungicides preventively next year if wet conditions are expected in the fall; curative applications will help arrest the disease, but the bermudagrass will still need enough heat to recover fully - make sure applications are made in at least 2 gallons of water per 1000 sq ft with flat fan nozzles to make sure the fungicides get to the affected roots, stolons and crowns.

# Fungicides Labeled for Rhizoctonia Brown Patch/Large Patch on Warm Season Turf

| Fungicide     | Class         | Example of available product | Use Rate (per 1 000 sq. ft)                         | Application Interval (days)            |
|---------------|---------------|------------------------------|---|--|
| flutolanil    | Carboxin      | ProStar                      | 1.5 to 2.2 oz <sup>P</sup> /<br>3.0 oz <sup>C</sup> | 14 to 21 <sup>P</sup> /14 <sup>C</sup> |
| iprodione     | Dicarboximide | Chipco 26GT                  | 3.0 to 4.0 floz                                     | 14 to 28                               |
| polyoxin D    | Polyoxin      | Endorse                      | 4.0 oz  | 7 to 14                                |
| azoxystrobin  | QoI           | Heritage                     | 0.4 oz  | 14 to 28                               |
| myclobutanil  | DMI           | Eagle                        | 0.6 oz  | 10 to 21                               |
| propiconazole | DMI           | Banner MAXX                  | 1.0 to 2.0 floz                                     | 10 to 21                               |
| triadimefon   | DMI           | Bayleton                     | 0.5 <sup>P</sup> /<br>1.0 <sup>C</sup> oz           | 14 to 30                               |

<sup>P</sup> preventive rate

<sup>C</sup> curative rate